

CLAIMS

What is claimed is:

1. A surgical saw blade coupler coupled to a motor for removably holding a surgical saw blade, the coupler comprising:

a housing for rotatably receiving the coupler and having a housing aperture and a bearing disposed in the housing aperture;

a cup disposed in the bearing and including a first end defining a cup aperture and a second end having a lip for limiting inward movement of the cup through the housing aperture;

a driver coupled to the motor for translating motion from the motor to the blade via the coupler;

a pin having an upper portion and a bottom portion and being attached to the driver; and

a cap disposed on the pin defining a coupler slot there between for receiving the surgical saw blade having a first end and a second end wherein the coupler is movable to and between an open position wherein the blade may be removed from, positioned within or inserted into the coupler, and a closed position for securing the blade within the coupler.

2. The coupler as set forth in claim 1 the upper portion including a top portion having a first diameter.

3. The coupler as set forth in claim 2 the upper portion including a coupling portion having a second diameter.

4. The coupler as set forth in claim 3 the first diameter being smaller than the

second diameter.

5. The coupler as set forth in claim 4 the cap including a cap aperture for receiving and securing the coupling portion.

6. The coupler as set forth in claim 4 the cap and the coupling portion are being affixed via a press fit.

7. The coupler as set forth in claim 1 the upper portion being cylindrical.

8. The coupler as set forth in claim 1 the pin including a circular portion having a circular outer edge.

9. The coupler as set forth in claim 8 the circular portion including a plurality of pin apertures.

10. The coupler as set forth in claim 9 each of the plurality of pin apertures including first and second arcuate sides and first and second linear sides.

11. The coupler as set forth in claim 9 the circular portion including four pin apertures.

12. The coupler as set forth in claim 1 the driver including a driven portion for coupling the driver to the motor for translating motion from the motor to the blade via the coupler.

13. The coupler as set forth in claim 12 the driven portion including a first prong and a second prong.

14. The coupler as set forth in claim 12 the driver including a locking portion.

15. The coupler as set forth in claim 14 the locking portion including an upper surface having at least one locking member disposed thereon.

16. The coupler as set forth in claim 15 each locking member being U-shaped.

17. The coupler as set forth in claim 15 the locking portion including four locking members.

18. The coupler as set forth in claim 15 each locking member including a first engaging prong, a second engaging prong and a central engaging portion.

19. The coupler as set forth in claim 18 the first end including a blade slot and a plurality of blade apertures for receiving one of the engaging prongs.

20. The coupler as set forth in claim 19 including the blade disposed in the coupler slot within the coupler in the open position and having the blade slot disposed about the coupling portion with the blade apertures in alignment with the engaging prongs.

21. The coupler as set forth in claim 19 each of the plurality of pin apertures for receiving portions of the first and second engaging prongs and the central engaging portion and securing the blade within the coupler in the closed position.

22. The coupler as set forth in claim 19 the coupling portion defining a ledge for receiving the cap and forming a back portion disposed on the coupler slot for receiving the blade.

23. The coupler as set forth in claim 1 the second end including a cutting edge having a plurality of teeth.

24. The coupler as set forth in claim 1 wherein the blade is a straight blade.

25. The coupler as set forth in claim 1 wherein the blade is a crescentic blade.

26. The coupler as set forth in claim 1 wherein the blade is a fan blade,

27. The coupler as set forth in claim 1 wherein the blade is an oral blade.